Title (en)

SLIDING COMPONENT

Title (de)

GLEITKOMPONENTE

Title (fr)

COMPOSANT COULISSANT

Publication

EP 3553353 A1 20191016 (EN)

Application

EP 17877432 A 20171201

Priority

- JP 2016237217 A 20161207
- JP 2017043225 W 20171201

Abstract (en)

Provided is a sliding component capable of fulfilling both conflicting conditions of sealing and lubrication, with a gas on the high-pressure fluid side and a liquid on the low-pressure fluid side.The sliding component includes a pair of sliding parts 3 and 5 sliding relative to each other, with a high-pressure gas present on one side of the pair of sliding parts 3 and 5 and a low-pressure liquid on the other side. At least the sliding part 5 has a sliding face S provided with positive pressure generation mechanisms 10 each having a positive pressure generation groove 11, and provided with an annular deep groove 14 on the high-pressure gas side. The annular deep groove 14 is isolated from the high-pressure gas side by a land R, and is connected to the low-pressure liquid side through radial deep grooves 13.

IPC 8 full level

F16J 15/34 (2006.01); **F16C 17/02** (2006.01); **F16C 33/12** (2006.01)

CPC (source: EP KR US)

F16C 17/02 (2013.01 - KR US); **F16C 17/026** (2013.01 - US); **F16C 17/045** (2013.01 - EP); **F16C 33/107** (2013.01 - US); **F16C 33/12** (2013.01 - KR US); **F16J 15/34** (2013.01 - US); **F16J 15/3412** (2013.01 - EP KR); **F16J 15/3416** (2013.01 - EP); **F16J 15/342** (2013.01 - EP); F16C 2361/00 (2013.01 - EP)

Cited by

EP4191098A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3553353 A1 20191016; **EP 3553353 A4 20200805**; **EP 3553353 B1 20240207**; CN 110023656 A 20190716; CN 110023656 B 20210604; EP 4191098 A1 20230607; JP 6861730 B2 20210421; JP WO2018105505 A1 20191024; KR 102447226 B1 20220926; KR 20190071793 A 20190624; US 11053974 B2 20210706; US 2019301522 A1 20191003; WO 2018105505 A1 20180614

DOCDB simple family (application)

EP 17877432 A 20171201; CN 201780073166 A 20171201; EP 23153236 A 20171201; JP 2017043225 W 20171201; JP 2018554968 A 20171201; KR 20197015309 A 20171201; US 201716465965 A 20171201